

# The Empirical First Amendment

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## I. INTRODUCTION

The First Amendment should protect not only the right to share ideas and factual claims, but also a (limited) right to test them.

At first, this proposition will seem implausible, even dangerous. The right to share and receive ideas is protected, in part, because expression causes no direct, physical harm.<sup>1</sup> Testing the validity of a claim, by contrast, often involves conduct that can directly bring noncommunicative harms.<sup>2</sup>

But this proposition is less crazy after recognizing two things. First, the performance of the “marketplace of ideas” depends on our ability to validate and invalidate competing claims.<sup>3</sup> Most claims, whether trivial (statements about a consumer good) or profound (statements about health, politics, or economic theory) are empirical claims that should be accepted or rejected by their audience on evidentiary grounds that the listeners can experience for themselves.<sup>4</sup> The proverbial marketplace cannot function if listeners are unable to access information or run the experiments they need to assess the validity of the claims that are offered to them. The state, therefore, exercises great control

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<sup>1</sup> See Leslie Kendrick, *The “Speech” in “Freedom of Speech,”* 116 MICH. L. REV. (forthcoming 2018) (manuscript at 35), <https://ssrn.com/abstract=2939794> [<https://perma.cc/EA5U-JQZC>] (pointing out the limits of this distinction and justifying the specialness of speech on other grounds); see also Jane R. Bambauer & Derek E. Bambauer, *Information Libertarianism*, 105 CAL. L. REV. 335, 339, 362–63 (2017) (noting that risks from speech “rarely materialize” and that direct behavior regulation differs from regulation of information); Seana Valentine Shiffrin, *A Thinker-Based Approach to Freedom of Speech*, 27 CONST. COMMENT. 283, 305–07 (2011) (comparing the effectiveness of using words to using violence).

<sup>2</sup> LAURENCE H. TRIBE, *AMERICAN CONSTITUTIONAL LAW* § 12-2 (2d ed. 1988) (distinguishing governmental free speech regulation of communicative impact versus noncommunicative impact).

<sup>3</sup> See *Abrams v. United States*, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting); see also Vincent Blasi, *Holmes and the Marketplace of Ideas*, 2004 SUP. CT. REV. 1, 2 (2005).

<sup>4</sup> See KARL R. POPPER, *THE LOGIC OF SCIENTIFIC DISCOVERY* 40 (1959) (“But I shall certainly admit a system as empirical or scientific only if it is capable of being tested by experience.”).

over human knowledge if it has unfettered power over the means of empirical testing, even if it has no ability to suppress the claims that are offered for public acceptance.

Second, the prospect of state suppression of empirical testing is no hypothetical. The government frequently exercises state power in ways that not only have the effect but the very *purpose* of suppressing empirical inquiry.<sup>5</sup> Federal and state regulations of research prohibit otherwise legal conduct that is done with an intent to learn.<sup>6</sup> Proposals for more and greater restrictions on research are emerging in the wake of advances in machine learning and AI-generated research.<sup>7</sup> Other laws indirectly but severely limit the ability to test hypotheses and generate new knowledge in the course of regulating trade secrets, privacy, professional malpractice, computer hacking, and public records, again often with the very purpose of obstructing access to knowledge.<sup>8</sup>

This Article explains why free speech theory and case law should, can, and to some extent already does recognize a First Amendment interest in testing competing theories. It then suggests how this constitutional interest can be cautiously expanded. This expansion will inure to the benefit of not only the participants but the modern regulatory state as well.

## II. THE FIRST AMENDMENT AS SCIENTIFIC METHOD

The First Amendment right to free expression aspires to be scientific.<sup>9</sup> The Founder Fathers were influenced by the philosophy of science coming out of the Enlightenment period,<sup>10</sup> and in the modern era, the Supreme Court has consistently placed its bets on the theory that truth will emerge from the “marketplace” of competing factual claims.<sup>11</sup> Even the Court’s analysis under

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<sup>5</sup> See Protection of Human Subjects, 45 C.F.R. §§ 46.101–.505 (2016).

<sup>6</sup> See *id.*

<sup>7</sup> See James Grimmelman, *The Law and Ethics of Experiments on Social Media Users*, 13 COLO. TECH. L.J. 219, 258–65 (2015) (arguing that social media and corporate research should be subject to ethical limits just as academic research); see also Ryan Calo, *Consumer Subject Review Boards: A Thought Experiment*, 66 STAN. L. REV. ONLINE 97, 101–02 (2013); Jules Polonetsky et al., *Beyond the Common Rule: Ethical Structures for Data Research in Non-Academic Settings*, 13 COLO. TECH. L.J. 333, 336–37 (2015); Sarah Bird et al., *Exploring or Exploiting? Social and Ethical Implications of Autonomous Experimentation in AI* (Oct. 2, 2016) (unpublished manuscript), <https://ssrn.com/abstract=2846909> [<https://perma.cc/LC8Q-ZY2R>] (arguing for more research on restricting AI-generated research).

<sup>8</sup> See *infra* notes 71–75 and accompanying text.

<sup>9</sup> This was impressed upon me by the excellent work of Joseph Russomanno. Joseph Russomanno, *Cause and Effect: The Free Speech Transformation as Scientific Revolution*, 20 COMM. L. & POL’Y 213, 251–55 (2015).

<sup>10</sup> See generally I. BERNARD COHEN, *SCIENCE AND THE FOUNDING FATHERS: SCIENCE IN THE POLITICAL THOUGHT OF JEFFERSON, FRANKLIN, ADAMS, AND MADISON* (1995).

<sup>11</sup> “[T]he best test of truth is the power of the thought to get itself accepted in the competition of the market . . . . That at any rate is the theory of our Constitution.” *Abrams v. United States*, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting).

free speech scrutiny, where it consistently demands valid proof that regulated expression will cause real world harms,<sup>12</sup> promotes the scientific community's secular, evidence-based approach to the discovery of truth and the creation of knowledge.

Fortunately, the scientific approach to the creation of knowledge is extraordinarily good, at least compared to its alternatives.<sup>13</sup> As Jonathan Rauch has explained, it requires adherence to just two simple rules.<sup>14</sup> First, no claim, no matter how absurd, unconventional, or unpopular, can be removed from consideration.<sup>15</sup> That is, there is no final say, by the government or any other institution, about what is and is not true. I will refer to this as "Claim Liberty" for shorthand.

Second, every person should be able to test the claim for himself to ensure that he gets the same results.<sup>16</sup> That is, nobody should have to rely on the personal authority of the speaker making a claim if they would prefer to verify it for themselves. This often (though not always<sup>17</sup>) requires people to have the means to collect information, observe evidence, or experience things for themselves. I will refer to this as "Empirical Liberty."

First Amendment law gives full and unabashed support to Claim Liberty. Even verifiable lies and hateful claims are protected from official suppression in order to avoid the problems that arise if the state claims final authority over what is and is not true.<sup>18</sup> The First Amendment "presupposes that there are no orthodoxies—religious, political, economic, or scientific—which are immune from debate and dispute."<sup>19</sup>

But the First Amendment does not and cannot give that type of support to Empirical Liberty. To see why it does not, consider the claim that the iPhone is waterproof.<sup>20</sup> Nearly every part of an empirical test, from the purchase of the

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<sup>12</sup> See *Sorrell v. IMS Health, Inc.*, 564 U.S. 552, 576 (2011); see also *Brown v. Entm't Merchs. Ass'n*, 564 U.S. 786, 799–804 (2011).

<sup>13</sup> I will concede that the First Amendment is an instantiation of an ideology, as Frederick Schauer has pointed out. See Frederick Schauer, *The First Amendment as Ideology*, 33 WM. & MARY L. REV. 853, 853–54 (1992). Given that information law (and indeed all law) must be premised on *some* ideology, the scientific and Enlightenment principles that inspired the country's founders is a good, defensible option.

<sup>14</sup> JONATHAN RAUCH, *KINDLY INQUISITORS: THE NEW ATTACKS ON FREE THOUGHT* 49 (expanded ed. 2013).

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> Some claims are matters of pure logic or opinion that require nothing more than thinking for the listener to test and reject or accept.

<sup>18</sup> See *United States v. Alvarez*, 132 S. Ct. 2537, 2547 (2012); *Nat'l Socialist Party of Am. v. Vill. of Skokie*, 432 U.S. 43, 43–44 (1977) (per curiam); *Brandenburg v. Ohio*, 395 U.S. 444, 448 (1969) (per curiam).

<sup>19</sup> *Int'l Bhd. of Elec. Workers, Local 501 v. NLRB*, 181 F.2d 34, 40 (2d Cir. 1950), *aff'd*, 341 U.S. 694 (1951).

<sup>20</sup> Lance Whitney, *You Asked: Are iPhones Waterproof?*, TIME (Sept. 19, 2017), <http://time.com/4947730/iphone-8-waterproof/> [<https://perma.cc/A5N4-4Z5V>].

phone, its transport, and its submersion into water involves noncommunicative conduct that can be regulated on the basis of its noncommunicative effects.<sup>21</sup> Even access to Apple's data on its own waterproofing tests would require an eager investigator to violate trade secrets, hacking, or trespass laws that are generally immune from free speech scrutiny.

To see why the First Amendment *cannot* give full support to Empirical Liberty, one needs only a brief tour through the broad range of descriptive claims that are theoretically testable but not practically so. Claims that a particular food or exercise reduces the risks of heart failure, or that a particular tax structure creates more jobs, are empirical claims, but a strong right to test the claims with the best possible experiment would enable the tester to impose serious interventions on other peoples' lives. This largely explains why the hard sciences like physics and geology can stick closer to the rules of the scientific method than the "wet" and "soft" sciences. If humans were studied the same way that rocks are, the interests in empirical testing would come into conflict with compelling human rights in safety and autonomy and would have to lose the competition most of the time.<sup>22</sup>

Thus, the First Amendment's support for the scientific process of truth-seeking is incomplete. It permits every claim to be submitted to the marketplace of ideas, (Claim Liberty), allowing a cacophony of proposed hypotheses, many of them wrong, many provably wrong.<sup>23</sup> But First Amendment case law and theory has done much less to give listeners the means to rationally choose between those competing theories.

This is not entirely surprising because Empirical Liberty is a modern fixture in the scientific community. During the time of the Founding Fathers, a commitment to Claim Liberty was revolutionary enough by taking control over the claims that can and cannot be put forward out of the hands of religious or government decision-makers.<sup>24</sup> It left the decision about which claims are accepted, and why, up to the individual listeners.<sup>25</sup> The philosophers of science did not fully flesh out and appreciate the importance of empirical methods until the early twentieth century, when Karl Popper formalized the requirement that a claim must be testable and falsifiable in order to be valid.<sup>26</sup> This requirement advances human knowledge by assuring all participants that they can see for

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<sup>21</sup> TRIBE, *supra* note 2, § 12-2 (distinguishing governmental free speech regulation of communicative impact versus noncommunicative impact).

<sup>22</sup> Empirical Liberties would even come into conflict with each other, since running one experiment would foreclose the possibility of running some other experiment, at least on the same people.

<sup>23</sup> See *Abrams v. United States*, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting) ("I think that we should be eternally vigilant against attempts to check the expression of opinions that we loathe and believe to be fraught with death . . .").

<sup>24</sup> 4 WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND: A FACSIMILE OF THE FIRST EDITION OF 1765-1769, at 151-53 (University of Chicago Press 1979).

<sup>25</sup> *Id.*

<sup>26</sup> POPPER, *supra* note 4, at 40-42.

themselves whether a claim gives an accurate account of the world and, therefore, helps kill off the theories that do not match the evidence.<sup>27</sup> Popper helped elucidate the importance of Empirical Liberty.

The value of Popper's contribution was also illustrated in real time by Albert Einstein's theory of special relativity.<sup>28</sup> The theory caused an uproar.<sup>29</sup> The European scientific community was so resistant to relativity that some believed the one virtue to the Nazi takeover of Germany was that it caused Einstein to permanently settle in America.<sup>30</sup> But Einstein was resilient. When the scientific community mobilized to publish a collection of essays titled *100 Authors Against Einstein*,<sup>31</sup> he shrugged it off. "If I were wrong, then one would have been enough."<sup>32</sup> That is to say, if his theory was wrong, any one person could go collect astronomical data that would disprove all or part of the theory.<sup>33</sup>

But without Empirical Liberty, people do not have the means to gather data and test competing propositions for themselves. A First Amendment that promotes Claim Liberty without offering Empirical Liberty may not actually be very scientific at all if the laws leave few opportunities for testing. Instead, it trades one monolithic, governmental, or religious authority for millions of individual king-popes who must resort to unscientific hunches or senseless beliefs since they cannot empirically test any of the competing claims.

I am not the first to observe that the First Amendment is an imperfect vehicle for generating factual truth, particularly since its design permits false claims to fester.<sup>34</sup> The scholars who have tackled the epistemic problems in First

<sup>27</sup> *Id.* at 42.

<sup>28</sup> STEPHEN HAWKING, A BRIEF HISTORY OF TIME 28–35 (10th anniversary ed. 1998).

<sup>29</sup> *See id.* at 193 (discussing how the scientific community attacked Einstein's theory and even set up an "anti-Einstein organization"); Nola Taylor Redd, *Albert Einstein: Before and After Relativity* SPACE.COM (May 2, 2014), <https://www.space.com/25729-albert-einstein-before-after-relativity.html> [<https://perma.cc/4LBU-99TT>] (noting how the scientific community withdrew from Einstein's theory of special relativity).

<sup>30</sup> HAWKING, *supra* note 28, at 193.

<sup>31</sup> HUNDERT AUTOREN GEGEN EINSTEIN [100 AUTHORS AGAINST EINSTEIN] (Hans Israel et al. eds., 1931).

<sup>32</sup> HAWKING, *supra* note 28, at 193.

<sup>33</sup> Or, alternatively, just one person could demonstrate an internal inconsistency with the theory using words alone. To date, no replicable experiment has falsified Einstein's special theory of relativity. Just last year, astrophysicists were able to confirm the existence of gravity waves, adding more corroborating evidence in its support. Calla Cofield, *In Historic First, Einstein's Gravitational Waves Detected Directly*, SPACE.COM (Feb. 11, 2016), <http://www.space.com/31900-gravitational-waves-discovery-ligo.html> [<https://perma.cc/FQT8-YPCK>].

<sup>34</sup> *See* Blasi, *supra* note 3, at 2; Frederick Schauer, *Facts and the First Amendment*, 57 UCLA L. REV. 897, 902 (2010) ("Yet although factual truth is important, surprisingly little of the free speech tradition is addressed directly to the question of the relationship between a regime of freedom of speech and the goal of increasing public knowledge of facts or decreasing public belief in false factual propositions."); *id.* at 910–11 ("Indeed, the persistence of the belief that a good remedy for false speech is more speech, or that truth will prevail in the long run, may itself be an example of the resistance of false factual propositions

Amendment theory have advanced corrections that abandon Claim Liberty in order to avoid the pernicious effects of false claims.<sup>35</sup> Robert Post argues that outside the scope of public debate, which is at best a free-for-all and at worst a cesspool, the state is largely free to regulate the claims of people who hold themselves out as experts and to treat listeners as dependents rather than participants in the creation of knowledge.<sup>36</sup> Fredrick Schauer has encouraged solutions that increase the influence of experts by using public funds to support and amplify their speech.<sup>37</sup> Both proposals encourage public reliance on state-chosen experts who serve as final authorities on factual truth either by practical necessity or by legal mandate.<sup>38</sup>

These are serious concessions to the ideal of building a First Amendment in the image of the scientific method. But they are also so practical that they seem to cause no major loss. After all, the best scientists rely on expert opinions in fields outside their own. Even if we had access to very good evidence or had unlimited opportunities to run experiments, no single person could test and verify every plausible claim (let alone every possible claim) that interests him or has a material effect on his life. It will, therefore, always be necessary to rely on other people's expert opinions in order to rule out inaccurate claims, and for the foreseeable future, the law will play some role in that process in some contexts where health or safety are at stake.<sup>39</sup>

However, without sufficient attention on the protection of Empirical Liberties, the legal rules that optimize collective knowledge for the short term, under assumptions of static or slow-moving access to empirical evidence, will not be optimal in the long term.<sup>40</sup> Over time, they may require a person to remain

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to argument and counterexample.”); *id.* (though Schauer also notes that the First Amendment is not the sole or even the primary source of society's lack of concern about factual accuracy). See generally SEANA VALENTINE SHIFFRIN, *SPEECH MATTERS: ON LYING, MORALITY, AND THE LAW* (2014).

<sup>35</sup> See ROBERT POST, *CITIZENS DIVIDED: CAMPAIGN FINANCE REFORM AND THE CONSTITUTION* 71–73 (2014); Schauer, *supra* note 34, at 917–18.

<sup>36</sup> See POST, *supra* note 35, at 71–73.

<sup>37</sup> See Schauer, *supra* note 34, at 917–18.

<sup>38</sup> Chris Robertson offers a different account of the relationship between Claim Liberty and Empirical Liberty in the context of drug labeling and advertising. He argues that the claims made by pharmaceutical manufacturers should be constrained in order to *induce* the manufacturers to engage in better empirical testing. Christopher Robertson, Essay, *When Truth Cannot Be Presumed: The Regulation of Drug Promotion Under an Expanding First Amendment*, 94 B.U. L. REV. 545, 558–65 (2014). This proposition uses restrictions on claims as an engine for empirical testing. But it leaves many open questions about whether this tradeoff is close to optimal and also whether the more general landscape of the regulation of research is consistent with this approach.

<sup>39</sup> See Claudia E. Haupt, *Professional Speech*, 125 YALE L.J. 1238, 1280 (2016); see also Jane R. Bambauer, *Snake Oil*, 92 WASH. L. REV. (forthcoming 2017) (manuscript at 29), <https://ssrn.com/abstract=3023388> [<https://perma.cc/A4CT-WRLT>].

<sup>40</sup> The creation of knowledge is not the only place where optimization under static conditions can undermine efficiency in the long term. For example, in accident law, rules requiring certain safety precautions, like football helmets and antilock brakes, can

reliant on the purported expertise of others even if there is no impediment to empirical inquiry. If the state directly restricts a person's ability to test and verify competing claims, or if the state indirectly and unnecessarily restricts his ability to do so, then any claim that the law *must* treat listeners as dependents on (state-selected) experts rings hollow.<sup>41</sup> More importantly, it raises legitimate questions about what value strong Claim Liberty can have if our Empirical Liberty is anemic by design.

This Article considers whether the First Amendment protects the people's right to test proposed claims for themselves either through experimentation or through access to relevant information. On the surface, this will seem like a dangerous idea because it risks radically expanding the scope of the First Amendment and bringing it into conflict with laws that regulate conduct. But on inspection, it is neither radical nor destructive.

### III. PROTECTIONS FOR EMPIRICAL LIBERTIES

Free speech theory has already embraced Empirical Liberty to some extent. The freedom of thought is one of the strongest constitutional commitments running through key First Amendment cases,<sup>42</sup> and that freedom protects the process of subjecting various theories to personal testing. Of course, thought experiments are self-contained in the minds of the people who run them, so they are readily distinguishable from conduct that attempts to access information or run a physical experiment. Nevertheless, the highly prized right to free thought should protect inquiry and investigation.<sup>43</sup> The thinker's interests are as concerned with Empirical Liberty as Claim Liberty. The free thinker must not only hear or consider competing theories but must decide for himself whether an offered proposition is consistent with his accumulated knowledge,

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counterintuitively cause accident rates to *increase* because people engage in riskier behavior in reliance on the precautions. Michael Munger, *The Dangers of Safety Equipment*, N.Y. TIMES (Jan. 6, 2017), <https://www.nytimes.com/2017/01/06/opinion/the-dangers-of-safety-equipment.html> [<https://perma.cc/GTT5-3T52>]. This has been called the "Peltzman effect." *Id.* Similarly, tort liability damage caps can cause technological innovations that reduce the most severe injuries to wane, exposing doctors to more liability in the long run. *See* HBS Working Knowledge, *How Malpractice Reform Affects Medical Device Innovation*, FORBES (Nov. 28, 2016), <https://www.forbes.com/sites/hbsworkingknowledge/2016/11/28/how-malpractice-reform-affects-medical-device-innovation/#50d4d3b3464e> [<https://perma.cc/BZG9-SZ8G>].

<sup>41</sup> Although, even with perfect Empirical Liberty, there will still be good reasons to create legal structures that allow people to rely on expert services like medical care knowing that the service provider conforms with a minimum level of expertise.

<sup>42</sup> *Williams-Yulee v. Fla. Bar*, 135 S. Ct. 1656, 1682 (2015) (Kennedy, J., dissenting) ("Free speech begins with the right of each person to think and then to express his or her own ideas."); *Stanley v. Georgia*, 394 U.S. 557, 564 (1969); *W. Va. State Bd. of Educ. v. Barnette*, 319 U.S. 624, 642 (1943).

<sup>43</sup> *See generally* SHIFFRIN, *supra* note 34.

experience, and personal values.<sup>44</sup> Thus, when the Supreme Court asserts that our First Amendment rights are breached by state attempts to control minds,<sup>45</sup> Empirical Liberty is already on the table. The only question is how broadly the liberty extends.

The courts have permitted for it to extend beyond the testing that can be done with the mind alone.<sup>46</sup> Recent case law has protected the right to mechanically capture information because courts have recognized that both speakers and listeners have an interest not only in exchanging claims, but in being able to better verify those claims with evidence that is more credible and reliable (with the understanding that perfection is not possible).<sup>47</sup>

For example, in *American Civil Liberties Union of Illinois v. Alvarez*, the Seventh Circuit found that the state's wiretap law prohibiting unconsented audio recording in public violated the First Amendment.<sup>48</sup> Its reasoning was primarily an outgrowth of Claim Liberty because the court thought the right to make a video was a necessary corollary to the right to disseminate it.<sup>49</sup> Thus, recording is just one example of speech-facilitating conduct that is protected because of the end result—more speech deposited into the marketplace of ideas.<sup>50</sup> But that is not all that *Alvarez* does. The court decided that First Amendment scrutiny was necessary not only because recording helps communication but because it preserves evidence in a way that offers particular credibility to listeners.<sup>51</sup> “[A]udio and audiovisual recording are uniquely reliable and powerful methods of preserving and disseminating news and information about events that occur in public. Their self-authenticating character makes it highly unlikely that other methods could be considered reasonably adequate substitutes.”<sup>52</sup>

Not long ago, the First Amendment coverage of digital sound and image capture was controversial,<sup>53</sup> but courts now take it for granted.<sup>54</sup> The First Circuit accepted without comment that a law banning photographs of filled-out ballots (“ballot selfies”) implicated free speech even though it left voters free to

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<sup>44</sup> Some of this testing will not be empirical in the sense of comparing the claim to observations from the world, but much of it will.

<sup>45</sup> “The First Amendment confirms the freedom to think for ourselves.” *Citizens United v. FEC*, 558 U.S. 310, 356 (2010).

<sup>46</sup> See *infra* notes 47–60 and accompanying text.

<sup>47</sup> *Am. Civil Liberties Union of Ill. v. Alvarez*, 679 F.3d 583, 586–87 (7th Cir.), *cert. denied*, 133 S. Ct. 651 (2012).

<sup>48</sup> *Id.*

<sup>49</sup> *Id.* at 595.

<sup>50</sup> Wesley J. Campbell, *Speech-Facilitating Conduct*, 68 STAN. L. REV. 1, 3–4 (2016).

<sup>51</sup> *Alvarez*, 679 F.3d at 586.

<sup>52</sup> *Id.* at 607.

<sup>53</sup> See Seth F. Kreimer, *Pervasive Image Capture and the First Amendment: Memory, Discourse, and the Right to Record*, 159 U. PA. L. REV. 335, 339 (2011).

<sup>54</sup> For more recent treatments showing the current state of the law, see generally Margot E. Kaminski, *Privacy and the Right to Record*, 97 B.U. L. REV. 167 (2017), and Justin Marceau & Alan K. Chen, *Free Speech and Democracy in the Video Age*, 116 COLUM. L. REV. 991 (2016).



communicate how they voted using other forms of speech.<sup>55</sup> Speakers who come armed with digital sound and image recordings offer not only their factual claims, but the relatively objective evidence that listeners can use to verify the claims.<sup>56</sup> That difference shows the constitutional significance of Empirical Liberty, and not just Claim Liberty.

The Supreme Court explicitly acknowledged a First Amendment interest in information-gathering in *Branzburg v. Hayes*.<sup>57</sup> Although the holding of the case assured that neutral laws of general applicability could be applied to news organizations and other information-gatherers,<sup>58</sup> the necessary implication is that a First Amendment right to news gathering would spring to action if a law targeted information-gathering for the very purpose of disrupting it. In one limited context—access to the courts—the Supreme Court has even recognized a positive right to access information, requiring court proceedings as a default to be open to the public.<sup>59</sup> Indeed, the judiciary is structured to offer a lot of raw material for empirical inquiry compared to other institutions; it permits parties to dislodge all sorts of documents and data through very permissive discovery rules.<sup>60</sup>

But the Court has not explored the logical implications or necessary limitations of Empirical Liberty. If we are committed to a scientific approach for First Amendment theory, then we must recognize the essential role of Empirical Liberty and protect it more vigorously than we currently do. That commitment will cause friction with current law and policy.

The first clash comes from restrictions on experimentation. Malpractice rules and federal statutory law often prohibit research on humans without prior consent or permission from an Institutional Review Board no matter what conduct is involved.<sup>61</sup> These restrictions apply any time the researcher has the intent to produce generalizable knowledge, even if the acts in which he engages are otherwise perfectly legal.<sup>62</sup> If a doctor studies how his patients have fared under two different courses of treatment without receiving consent in advance,

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<sup>55</sup> See *Rideout v. Gardner*, 838 F.3d 65, 72 (1st Cir. 2016).

<sup>56</sup> *Marceau & Chen*, *supra* note 54, at 1009–10 (noting that video recording’s ability to document interactions can provide individuals with evidence to validate claims and increase credibility).

<sup>57</sup> *Branzburg v. Hayes*, 408 U.S. 665, 707 (1972) (“[N]ews gathering is not without its First Amendment protections . . .”).

<sup>58</sup> *Id.* at 682–83 (citing *Associated Press v. NLRB*, 301 U.S. 103, 132–33 (1937)).

<sup>59</sup> See *Globe Newspaper Co. v. Superior Court*, 457 U.S. 596, 604–05 (1982); *Richmond Newspapers, Inc. v. Virginia*, 448 U.S. 555, 576, 580 (1980).

<sup>60</sup> The courts also impose a strong presumption against protective orders. *Jepson, Inc. v. Makita Elec. Works, Ltd.*, 30 F.3d 854, 858 (7th Cir. 1994).

<sup>61</sup> See *Protection of Human Subjects*, 45 C.F.R. §§ 46.101–.505 (2016); see also *supra* note 7 and accompanying text (discussing the rules regarding research on humans).

<sup>62</sup> Jane R. Bambauer, *All Life Is an Experiment. (Sometimes It Is a Controlled Experiment.)*, 47 LOY. U. CHI. L.J. 487, 509 (2015); Grimmelmann, *supra* note 7, at 261 (“The Common Rule distinguishes between unregulated practice and regulated ‘research’ by defining research in terms of intended contribution to ‘generalizable knowledge.’”).

he will have committed malpractice even if both treatments are within the standard of care and are consistent with the recommendations he would have made anyways.<sup>63</sup> And academic researchers must receive prior approval from their institutions before studying any identifiable or potentially identifiable human subjects, even if their research has no effect on the subjects' lives.<sup>64</sup> Since these restrictions target research *qua* research, any level of commitment to Empirical Liberty should trigger First Amendment scrutiny of these laws. And while reasonable minds may differ on the nature of that scrutiny, the breadth of current restrictions on research probably sweeps much wider than the countervailing interests in safety, autonomy, and dignity can justify.

The invalidation of research law is not as dangerous as it may seem at first blush. Even if the laws regulating research were revoked, laws of general application would frustrate a lot of experimentation, and for good reason. If a researcher replaced an unsuspecting person's medication with a placebo, or stole a valued personal item to collect a sample, he would violate the criminal, tort, and property laws that protect the person's fundamental interests in the control of his own body, home, and things. State law protecting these rights are orthogonal to any state goal to suppress knowledge. So no matter how important the research may be, it cannot be used to invalidate these types of laws or their application to researchers.

Perhaps under *United States v. O'Brien*, the courts would have to ensure that the incidental restrictions on experimentation caused by general regulations of conduct would be "no greater than is essential" to further the state's interest,<sup>65</sup> but the Court has never demonstrated what limit (if any) this part of the *O'Brien* test poses. Empirical Liberty may require that laws of general application leave open some alternative channels of experimentation and evidence-gathering. At the very least, enforcement would have to be done evenhandedly without targeting information-gatherers.

But the rules regulating research purposefully target knowledge-acquisition. Stripping away some of the current regulations and ethical sensibilities about research would make a small difference today and a big difference tomorrow. Current law inhibits traditional means of experimentation even where there is no known or foreseeable risk from the intervention. If the law is expanded (which many scholars have advocated for<sup>66</sup>), it would stifle the future development of knowledge through automated trials and data analysis.

The second significant clash between Empirical Liberty and modern regulation comes from laws that directly and purposefully restrict access to information. The First Amendment has long protected the right of "insiders" to share information with "outsiders" by applying scrutiny when the law burdens

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<sup>63</sup> Bambauer, *supra* note 62, at 507.

<sup>64</sup> See *id.* at 509 n.80 (explaining that "exempt" research must undergo an approval process to ensure that the research really is exempt); see also 45 C.F.R. §§ 46.101–.505.

<sup>65</sup> *United States v. O'Brien*, 391 U.S. 367, 377 (1968).

<sup>66</sup> See *supra* note 7 and accompanying text.

or restricts that information dissemination.<sup>67</sup> But until recently, courts have been blind to the First Amendment's application to another category of rules: those that restrict outsiders from attempting to access the information without the cooperation of insiders.<sup>68</sup> These laws include civil and criminal trade secrets laws, privacy laws (including the Wiretap Act, the Fair Credit Reporting Act, and the intrusion upon seclusion tort), and anti-hacking laws (including the Computer Fraud and Abuse Act (CFAA) and the Espionage Act).<sup>69</sup>

Unlike trespass and battery laws, these laws are designed to obstruct information-gathering. Like bans on mechanical recording (described above),<sup>70</sup> they could be challenged not only for interfering with Empirical Liberty but also for restricting the production of future speech and, thus, interfering with Claim Liberty.<sup>71</sup> However, most of these examples differ from laws restricting research in one major respect: they are more closely drawn to concrete and important state interests. Trade secrets can help foster innovation similarly to patents.<sup>72</sup> Anti-hacking laws prevent espionage, denial-of-service attacks, and downstream identity theft.<sup>73</sup> Wiretapping laws and legal duties of confidentiality can provide a healthy and necessary respite from the pressure of social judgment.<sup>74</sup> Many of the laws designed to manage information flows have a sufficiently compelling explanation at their center that they should withstand facial challenges and avoid wholesale razing.

Nevertheless, First Amendment interests in Empirical Liberty should give litigants an opportunity to challenge the contours of information-gathering prohibitions when they are applied to harmless empirical inquiry. For example, the CFAA has been interpreted by several federal courts to apply serious civil and criminal penalties to anybody who accesses a website for a purpose that violates the website's terms of service, even when the website is available to the public without password protection.<sup>75</sup> The criminal provisions are not limited to

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<sup>67</sup> See *Branzburg v. Hayes*, 408 U.S. 665, 681 (1972); *Am. Civil Liberties Union of Ill. v. Alvarez*, 679 F.3d 583, 586 (7th Cir. 2012), *cert. denied*, 133 S. Ct. 651 (2012).

<sup>68</sup> *Animal Legal Def. Fund v. Otter*, 118 F. Supp. 3d 1195, 1199 (D. Idaho 2015).

<sup>69</sup> See Jane Bambauer, *Is Data Speech?*, 66 STAN. L. REV. 57, 61 (2014) ("A large and growing body of wiretap statutes and information security laws rely heavily on the distinction [between information and information gathering].").

<sup>70</sup> See *supra* notes 47–52 and accompanying text.

<sup>71</sup> *Id.* at 63. Claim Liberty and Empirical Liberty are closely related since the process of testing a hypothesis is useful both for validating or invalidating an existing claim and for later offering a claim with stronger evidence. They are both cogs in the machine of scientific progress. I have argued that the First Amendment should protect information-collection as a necessary part of knowledge creation and, thus, of the freedom of thought. *Id.* at 61.

<sup>72</sup> They may even foster a different style of collaboration and invention than the patent system can. See Derek E. Bambauer, *Secrecy Is Dead—Long Live Trade Secrets*, 93 DENV. L. REV. 833, 833–37 (2016).

<sup>73</sup> Computer Fraud and Abuse Act, 18 U.S.C. § 1030 (2012).

<sup>74</sup> See 18 U.S.C. § 2511 (2012).

<sup>75</sup> *CollegeSource, Inc. v. AcademyOne, Inc.*, 597 Fed. App'x 116, 129–30 (3d Cir. 2015); *EF Cultural Travel BV v. Zefer Corp.*, 318 F.3d 58, 62 (1st Cir. 2003); *United States*

instances of unauthorized access that cause risk of harm.<sup>76</sup> And both the criminal and civil provisions of the CFAA expose violators to much more liability than an ordinary contract claim would.<sup>77</sup> In theory, a website's terms of service could restrict access to users who prefer dogs to cats, and unsuspecting cat-lovers would become criminally liable by continuing to engage the website. Of course, websites do not have these sorts of wacky terms, but they do have terms that forbid scraping information and the use of fake identities to make online accounts.<sup>78</sup> The CFAA, therefore, dangles significant risk of punishment over researchers who would like to test online services for evidence of racial bias or who would like to scrape publicly displayed information in order to put it in a more usable form for sociological research.

The American Civil Liberties Union (ACLU) is currently representing a group of researchers to challenge the CFAA on First Amendment grounds.<sup>79</sup> Some aspects of the case, such as examples where a website's terms of service would prohibit the future publication of any remarks that disparage the company, seem very likely to persuade a court to set limits on the scope of the CFAA when it borrows terms of service for its activation. Other aspects, such as the researchers' interests in scraping publicly available information, may rely on the accumulating cases that recognize a First Amendment right to record in public.<sup>80</sup>

However, a third set of examples in the ACLU's case are much more difficult using current precedent: the ACLU argues that researchers should be able to not only access information on a public website without risk of criminal liability but also engage in deceit in order to study the company that runs the website or the other users of its services.<sup>81</sup> For example, one set of plaintiffs wishes to be able to test websites that manage housing and apartment listings to see whether minority users of the website are steered to different options than white users are.<sup>82</sup> This would involve creating profiles with false information in violation of the website's terms of service.<sup>83</sup> Pretexting that is done for the

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v. Lowson, No. 10-114 (KSH), 2010 WL 9552416, at \*5 (D.N.J. Oct. 12, 2010) (prosecuting for violating website terms of service); *United States v. Drew*, 259 F.R.D. 449, 456–57, 461, 467 (C.D. Cal. 2009) (finding a violation of terms of service is sufficient but also finding that the criminal sanctions for violating terms of service alone was unconstitutionally vague).

<sup>76</sup> See 18 U.S.C. § 1030(a).

<sup>77</sup> The CFAA allows civil claimants to seek compensatory damages, and defendants are also at risk of criminal prosecution. 18 U.S.C. § 1030(c), (g).

<sup>78</sup> See Complaint at 19, *Sandvig v. Lynch*, No. 1:16-cv-01368 (D.D.C. June 29, 2016), <https://www.aclu.org/legal-document/sandvig-v-lynch-complaint> [<https://perma.cc/3E7J-UPAG>] (“[T]en commonly-visited employment websites . . . all prohibit scraping and providing false information.”).

<sup>79</sup> *Id.* at 4.

<sup>80</sup> See *supra* notes 47–52 and accompanying text.

<sup>81</sup> Complaint, *supra* note 78, at 34, 37.

<sup>82</sup> *Id.* at 24.

<sup>83</sup> See, e.g., Alessandro Acquisti & Christina Fong, *An Experiment in Hiring Discrimination Via Online Social Networks* (July 17, 2015) (unpublished manuscript at 3),

purpose of impersonating another person to receive a benefit that should go to them, or to engage in some other form of fraud, may be the sort of conduct that is appropriate for the CFAA's application. It is, after all, analogous to providing another person's credentials to access a nonpublic server. But pretexting for research purposes does *not* pose the sort of societal risks that should be allowed to trump Empirical Liberty. If the research risks harming the reputation of the service (by, e.g., generating evidence of racial bias), those risks to the company are mirror opposites to the benefits for the public.<sup>84</sup> At times, courts have recognized that the public benefits from deceit by testers,<sup>85</sup> but the benefit has never been blended into First Amendment doctrine. Empirical Liberty provides a conceptual basis to do so.

One last observation about where a modest commitment to Empirical Liberty could lead us: so far, the examples I have covered involve a negative constitutional right—a right to be free from punishment if we are engaging in information-gathering or low-risk experimentation. Empirical Liberty could provide the basis for a positive right to access information too, particularly with respect to information maintained by the government. Today, access to public records is a matter of largess.<sup>86</sup> Federal and state laws set the terms of access, and they exempt a good deal of information from disclosure.<sup>87</sup> If a well-functioning marketplace of ideas depends on the people's ability to test the claims and charges against empirical evidence, it may offend free speech ideals when the government hordes that probative evidence. A positive right to access information can become absurd very quickly, so I do not mean to suggest that the First Amendment would require the government to engage in experiments or information-collection that it would not otherwise do. But where information already exists within public coffers, any denial of access should be justified on the same terms as the prohibitions on information-collection discussed above.

This Part has explored some of the implications of a limited right to Empirical Liberty. The result would be another expansion of First Amendment coverage, a prospect that will worry many progressive defenders of the modern regulatory state who already see free speech law as a threat.<sup>88</sup> But as the next Part will show, Empirical Liberty has the potential to indirectly help regulators, too.

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<http://dx.doi.org/10.2139/ssrn.2031979> [<https://perma.cc/RM5A-MZFJ>] (using fake Facebook profiles to test whether employers used social media to make hiring decisions).

<sup>84</sup> As for risks to individual users of the website who may interact with a researcher, those users will be harmed only if the researcher's online behavior is unusually invasive or anxiety-producing. Such behavior may trigger legal liability of some other sort (intentional infliction of emotional distress, or violation of the privacy torts, for example), but they are additional to and independent from the researcher's access to the online service or forum.

<sup>85</sup> See *Desnick v. Am. Broad. Cos., Inc.*, 44 F.3d 1345, 1351–52 (7th Cir. 1995).

<sup>86</sup> See Daniel J. Solove, *Access and Aggregation: Public Records, Privacy and the Constitution*, 86 MINN. L. REV. 1137, 1212 (2002).

<sup>87</sup> See *id.* at 1161–62.

<sup>88</sup> See Robert Post & Amanda Shanor, *Adam Smith's First Amendment*, 128 HARV. L. REV. F. 165, 179 (2015).

## IV. THE PAYOFF FOR THE MODERN REGULATORY STATE

Expansions to First Amendment coverage are always going to interfere with regulators in the most direct sense. But, over time, constitutional protection for Empirical Liberty can embolden the regulatory state and help insulate it from collateral attack by greatly increasing the quantity and quality of information.

The state stands to benefit from the fruits of Empirical Liberty in two ways. First, empirical studies and data can help improve the state's selection of political priorities and the efficacy of its political solutions. Federal, state, and local governments are all making efforts to move away from regulation by anecdote and toward an evidence-based approach to lawmaking.<sup>89</sup> This year, Congress passed the Evidence-Based Policymaking Commission Act of 2016 that established a commission to help guide and transition the federal government to an approach that harnesses the insights from data and empirical research.<sup>90</sup> Unfortunately, the commission itself has put excessive emphasis on privacy, discrimination, and other issues that have historically led to the restriction, rather than the promotion, of research in order to curb small or hypothetical risks.<sup>91</sup> But the very existence of the commission suggests that the federal government has a genuine desire to increase knowledge through empirical studies.

Second, the rapid increase in empirical evidence that is likely to blossom now that data is big, experimentation is automated, and machines can learn can help the state resist First Amendment challenges, counterintuitive as that seems. What courts demand from the government, when scrutiny is applied to a law, is evidence.<sup>92</sup> Oliver Wendell Holmes' legacy on First Amendment doctrine is a solemn commitment from the judiciary to approach a state's claim that speech is harmful with great skepticism.<sup>93</sup> Although the Court has left open the possibility of common sense providing sufficient proof of the necessity and efficacy of a speech restriction, in practice it has demanded empirical evidence.<sup>94</sup> This puts tremendous pressure on the legislature to have such evidence and on the courts to competently assess it.

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<sup>89</sup>G. WILLIAM HOAGLAND ET AL., BIPARTISAN POLICY CENTER, CONGRESS AND EVIDENCE-BASED POLICYMAKING: CREATING A 21ST CENTURY LEGISLATURE 6 (May 2017), <https://bipartisanpolicy.org/library/congress-and-evidence-based-policymaking/> [<https://perma.cc/LA9A-GE8G>].

<sup>90</sup>Evidence-Based Policymaking Commission Act of 2016, Pub. L. No. 114-140, 130 Stat. 317.

<sup>91</sup>Nat'l Acads. of Scis., Eng'g, & Med., Second Meeting of the Commission on Evidence-Based Policymaking, LIVESTREAM (Sept. 9, 2016), <https://livestream.com/accounts/7036396/events/6265619/videos/137020942> [<https://perma.cc/K5T6-LUQU>].

<sup>92</sup>See *supra* note 12 and accompanying text.

<sup>93</sup>See *Abrams v. United States*, 250 U.S. 616, 627 (1919) (Holmes, J., dissenting) (requiring a "clear and imminent danger").

<sup>94</sup>See *Brown v. Entm't Merchs. Ass'n*, 564 U.S. 786, 799–804 (2011); *City of Erie v. Pap's A.M.*, 529 U.S. 277, 312 (2000); *First Nat'l Bank of Bos. v. Bellotti*, 435 U.S. 765, 789 (1978) ("But there has been no showing that the relative voice of corporations has been

Empirical Liberty can help both fronts. First, even when the state has the desire to construct legal restrictions on information in a way that addresses realistic risks without imposing unnecessary burdens on speech, it is forced to do so with a paucity of reliable data.<sup>95</sup> Disinterested researchers who attempt to collect data about the usage and effect of online information services are stymied more often by legal impediments than technical ones.<sup>96</sup> Empirical liberty could help regulators understand which types of speech cause concrete, verifiable harm. An abundance of data introduces new problems—namely, differentiating good from bad studies when all sides come with some empirical support.<sup>97</sup> But those problems are mitigated with increased competence among judges,<sup>98</sup> not by keeping the number of studies or the quality of available data low.

## V. CONCLUSIONS

Empirical Liberty is the neglected sibling of Claim Liberty that gives all Americans the opportunity not only to receive competing messages, but to assess their worth. Courts cannot give the robust constitutional protection to Empirical Liberty that they currently apply to Claim Liberty. Unbridled experimentation and information-gathering would run roughshod over the rights and interests of other people. But courts can, and should, recognize a constitutional interest when empirical inquiry poses little to no risk. In some limited cases, they already do.

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overwhelming or even significant in influencing referenda in Massachusetts . . . .”); *N.Y. Times Co. v. United States*, 403 U.S. 713, 727 (1971) (Brennan, J., concurring) (per curiam).

<sup>95</sup> See *supra* notes 92–94 and accompanying text.

<sup>96</sup> See *supra* notes 75–79 and accompanying text.

<sup>97</sup> Edward E. Leamer, *Let's Take the Con out of Econometrics* 1 (UCLA Discussion Paper No. 239, 1982), <http://www.econ.ucla.edu/workingpapers/wp239.pdf> [<https://perma.cc/GT5S-J9SM>].

<sup>98</sup> The judiciary is sometimes criticized for having less competence than the democratically accountable branches of the government at assessing the quality of empirical evidence. Justice Breyer is the Court's biggest critic in this regard, admonishing that the Court should give deference to the legislature on technical matters since the Court lacks proficiency. *Brown*, 564 U.S. at 855 (Breyer, J., dissenting). However, when the Court addressed a topic that Justice Breyer was quite familiar with—copyright—the Justice felt perfectly comfortable rejecting the poor quality studies on which Congress had relied to extend the copyright term in order to generate the incentive to create new works. *Eldred v. Ashcroft*, 537 U.S. 186, 248–49 (2003) (Breyer, J., dissenting). In any case, the judiciary generally, and the Supreme Court in particular, have the time, resources, job security, and help from expert witnesses and amici to assess empirical claims, while agencies and legislative bodies may not. Moreover, the issues over which the judiciary has primary responsibility will require the Court to assess empirical evidence, so competence in quantitative methods is imperative. See generally DAVID L. FAIGMAN, *CONSTITUTIONAL FICTIONS: A UNIFIED THEORY OF CONSTITUTIONAL FACTS* (2008).

